

Trends in off-farm work; hired farm labor; age and sex patterns in migration; opportunities for farm people.

Adjustments in Rural Human Resources

CALVIN L. BEALE

Agricultural Marketing Service, USDA

KARL G. SHOEMAKER

Federal Extension Service, USDA

IT IS DIFFICULT to discuss adjustments in rural human resources without first defining the people who comprise this resource. Under the rapidly changing conditions of rural life, the concepts "rural" and "farm" have become increasingly difficult to agree upon and their operating definitions have changed. The rural U.S. population of the mid-twentieth century has been defined as including those persons who live outside population centers of 2,500 or more inhabitants. It excludes persons who live in the densely settled fringes of metropolitan cities.

NUMBERS OF PEOPLE: FARM AND OTHER RURAL

Farm people have traditionally been defined in federal statistics as persons who say they live on a farm. This simple, subjective method used to give results that were reasonably comparable with data on number of farms as obtained by detailed questions on acreage of farmland and value of crops produced or sold in censuses of agriculture.

Gradually, the proportion of people who reported themselves as farm residents, but who had no agricultural occupation or income, increased. Hundreds of thousands, for example, rented former farmhouses for cash and were improperly retained in the farm population statistics. At the same time, the Bureau of the Census found it increasingly difficult to administer the census of agriculture under the old rules which did not require all places to actually sell farm products in order to qualify as farms. To improve the statistics, it was decided to restrict the term "farm" in the 1959 Census of Agriculture to places selling farm products and having a certain minimum number of acres. Farm residence was determined in the 1960 Census of Population by the criteria of acreage and sales used in the agriculture census.¹

Unpublished sample surveys run by the Bureau of the Census and the Agricultural Marketing Service indicate that this change in definition of farm population will probably result in lowering the official count of farm residents by about five million. Since the last estimate of farm population under the old definition was about 21 million, the change in definition alone will reduce the level of farm population by from 20 to 25 percent.

It should be emphasized that the people being dropped from the farm category have virtually no direct economic dependence on farming. They either live on places on which farming operations — other than for home use — have

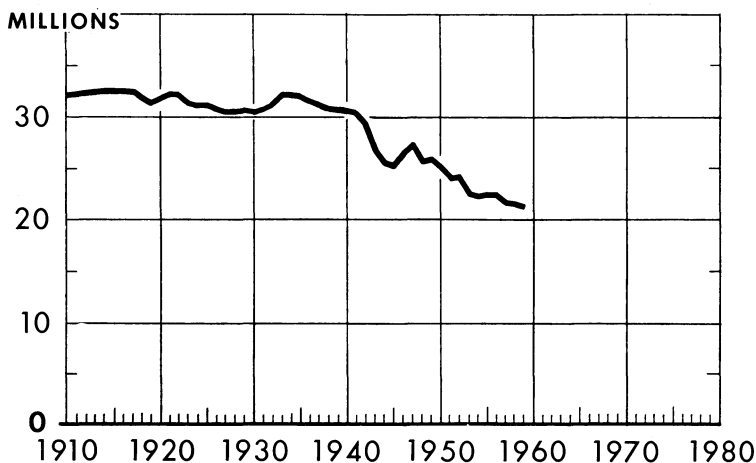
¹ To be precise, a farm is now a place of 10 acres or more from which at least \$50 worth of products were sold in the last year, or a place of less than 10 acres from which at least \$250 worth of products were sold.

ceased or they have been incorrectly identified as farm residents because the house and yard they occupy for cash is considered to be located on a farm. Unfortunately, the 1960 census farm population statistics will not be available until late 1961. Thus, the remainder of this discussion of farm population must be in terms of the former definition. It is known, though, that the farm population under the new definition will show sharper differences from the nonfarm population's social and economic characteristics than was true under the broader old definition.

Trends in Farm Population

The estimated farm population in 1959 was 21,172,000. Despite the increasing inflation of the farm population figure by persons not engaged in farming — as mentioned above — the farm population has fallen from 25,058,000 in 1950 and 30,547,000 in 1940 (Figure 10.1).

The latter figure is not too much different from the all-



BASED ON COOPERATIVE ESTIMATES OF THE AGRICULTURAL MARKETING SERVICE AND THE BUREAU OF THE CENSUS

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Fig. 10.1 — Trend of farm population in the United States.

time high of 32,530,000 estimated to have been reached in 1916. Nearly half of all farm people live in the South, broadly defined, but the proportion doing so is falling year by year because of the heavy outmigrations from the South Central states. The Great Plains states also continue to lose more rapidly than the national average, but other northern and western areas have been more stable.

A combination of high birth rate and heavy outmigration has caused the age distribution of farm people to differ from that common to the urban United States. The farm population has a high proportion of children and a low proportion of young adults. For example, in the farm population there are 24 persons between ten and nineteen years of age for every 10 between the ages of twenty and twenty-nine. In urban areas this ratio is only 12 to 10.

The proportion of elderly persons in the farm population is no higher than the national average, because many elderly farm people move to the cities. However, the out-movement of younger adults from farm areas has been so heavy in recent years that in 1959 for the first time farm people forty-five years old and over outnumbered those at ages eighteen to forty-four. This condition may be essentially temporary. As older farm adults die or retire there will no longer be equal numbers of younger farm adults available to replace them.

When farm population statistics were first collected (1920), almost 17 percent of the farm people were of nonwhite races. Ninety-six percent of these were Negro. The next 20 years saw a moderate decline in nonwhite farm residents, both in numbers and proportion, as the cotton plantation system in the Southeast began to break up. The decline was greatly accelerated after 1940. More than two million southern Negro farm people left their farms in the 1940-50 decade. This movement was clearly fostered by rapid farm mechanization, lowered need for tenant operators, abundant nonfarm employment and income opportunities, and military conscription. But it may be that purely

social factors — such as changing attitudes towards the acceptance of traditional patterns of race relations — were also of major importance.

Nonwhite farm people numbered about 3,150,000 in 1959, or 14.5 percent of the total.² The prospect is that this number will go much lower. The majority of nonwhite farmers are still small-to-medium scale tenants, subject to the hazards that acreage adjustments, land retirement programs, and changing technology pose for tenants.

Changes in Dependency on Farming

One of the principal ways in which farm people have adjusted to economic conditions is by taking off-farm employment. Inadequate income from farming, the enhanced cash needs of modern living standards, increased prevalence of good roads and automobiles, and dispersal of industry to rural areas all contributed to this trend, as ample testimony from farmers indicates. In April of 1940 — at a time when many farmers were in economic distress but nonfarm work was not plentiful — 21.5 percent of employed farm residents worked wholly or primarily outside of farming. By 1959, unpublished data show this percentage to have risen to 40.6 percent.

The mechanism of this change is two-fold. (1) The proportion of employed farm men who work at nonfarm jobs has more than doubled. (2) The proportion of farm women who have any employment has risen considerably, from 12 percent in 1940 to 28 percent nearly 20 years later. As a result of extensive nonfarm jobholding, about 30 percent of the income farm families received as we entered the 1960's came from nonfarm sources.

The increased participation of farm operators in the off-farm labor market has not been accomplished by taking *part-time* jobs. The proportion of farm operators who did part-time off-farm work (1–199 days a year) was the same

² Bureau of the Census, unpublished data.

in 1954 as in 1934 — about 25 percent. But the proportion of farmers working on a *full-time* basis off the farm (200 days or more) rose steadily throughout this period from 6 percent to 22 percent.

The availability of off-farm work has enabled many farm families to remain on the farm as they wished when otherwise they would have felt the necessity to leave. The effects of full-time off-farm work on the farm operation may be far from beneficial, but this consideration will not be examined here.

Families living on places called farms and having a male member working entirely or primarily at a nonfarm job frequently have little farm production. The revised farm population definition will remove more than half of these families from the farm population classification. In the new farm population, less than one-third of the employed workers will be in nonfarm jobs compared with the 40 percent listed under the old method of classification.³

Trends in Rural-Nonfarm Population

In these days of shrinking farm population, many professional workers who once served farm people almost exclusively are now anxiously widening their work to include the nonfarm population. The rural-nonfarm population has always been with us, but received little attention as a residual and somewhat heterogeneous population left after the urban and farm populations were counted.

Although it was not until World War II that rural-nonfarm people first equaled farm people in numbers, the 1960 census will show between 45 and 50 million rural-nonfarm population. This will be approximately three times as large as the farm population by the new definition.

The rural-nonfarm population is a mixture of village residents, open-country nonfarm residents, highway "string" settlements, military personnel, and residents of

³ Bureau of the Census, unpublished data.

institutions. Rural colleges, prisons, hospitals, and other institutions are always classed as nonfarm. About 6 percent of the civilian workers in this group (rural-nonfarm) are engaged in farming, the majority as hired workers.⁴ Rural-nonfarm workers engage in farming, mining, and construction to a greater extent than city workers, but otherwise their industrial distribution is very much like that of city people.

Occupationally, the rural-nonfarm population has a considerably higher-than-average proportion of such workers as clergymen, teachers, carpenters, saw-mill hands, textile-mill operatives, auto mechanics, fishermen, cooks, and laborers. Many of these pursuits are not well paid. This fact shows up in a median income differential of \$600-\$800 between urban and rural-nonfarm families.⁵ The occupational and income structure of the rural-nonfarm population is being upgraded, however, by improved accessibility to a wider variety of jobs and by increased movement of urban people into rural-nonfarm areas.

To an increasing extent, the rural population tends to concentrate along main roads, within easy commuting distance of cities or rural-located industries. The result of the decline in the farm population and the redistribution of the rural-nonfarm population is the partial depopulation of vast areas. It is not widely appreciated that in the 1950's, when the national population grew by about 28 million (or more than 18 percent), half or more of the total land area of the nation experienced a population decline that was often severe. In contrast to the atmosphere of boom and bustle that pervades most urban areas, many rural people are daily confronted with such visible effects of population loss as brush-grown fields, abandoned barns, and deteriorating houses.

⁴ Bureau of the Census, unpublished data.

⁵ Based on 1949 census data.

Trends in Hired Farm Labor

No group of agricultural people has been more affected by the changes in recent years than the hired farm workers. For every two farm operators who have farming as their sole or principal job, there is on the average one hired worker whose main occupation is farm labor.

The approximately one and one-half million farm jobs that provide primary employment at wages during a year greatly understate the total number of people involved in hired farm labor. In many types of farming, mechanization has eliminated the need for a full-time hired hand without lessening the need for seasonal workers. Thus, to an increasing extent, persons engaged in hired farm work are so employed for only short periods of the year. The total number of persons doing any hired farm work has increased in recent years rather than declined. In 1958, 4,200,000 people did some farm wage work, but of this number 45 percent worked less than 25 days and an additional 37 percent worked from 25 to 149 days (Table 10.1).

TABLE 10.1
PERSONS DOING FARM WAGE WORK, 1946-58

Year	Amount of work			
	<i>Total</i>	<i>Under 25 days</i>	<i>25 to 149 days</i>	<i>150 days or more</i>
1946	2,770,000	817,000	1,089,000	864,000
1952	2,980,000	1,008,000	1,252,000	720,000
1958	4,212,000	1,893,000	1,653,000	756,000
<i>Percent Distribution</i>				
1946	100	29	40	31
1952	100	34	42	24
1958	100	45	37	18

Source: *The Hired Farm Working Force of 1958*, USDA, pp.6, 9.

In 1952, only three million people did any farm wage work. One-third of them (34 percent) worked less than 25 days. After earlier declines, the number of full-time hired workers has been rather stable since 1952. Migratory workers, exclusive of foreign nationals, make up about 10 percent of the total hired farm work force. They do not tend to migrate in large numbers for less than 25 days of work annually. On the other hand, they do not have full-time farm work of at least 250 days annually to the extent that nonmigratory workers do.

One result of the increasingly seasonal and temporary nature of farm labor has been a shift in the residence pattern of farm workers. Formerly, the great majority lived on farms. For example, in April 1940, three-fourths of the hired farm workers were farm residents. Only one-fourth of the remainder were urban. By contrast, in February 1959, only half of the persons who did at least 25 days of farm wage work in the previous year were farm residents. (The data are not strictly comparable, but the trend is real.) The number of farm workers living on farms has fallen, but the number living in cities, villages, and other nonfarm residences and commuting to the farms has greatly increased.

Three-fifths of the white people who ever do farm wage work look on it as a temporary type of work. It often is associated with a particular period in youth, and is not engaged in for more than three calendar years. Farm labor is much more frequently a permanent type of employment for Negroes and other nonwhites. Negroes comprise only a small minority of beginning farm wage workers, but constitute close to half of the core of workers who have spent at least ten years in such work. It is forecast that in the future, the number of farm wage workers will decline. Of the major occupation groups, hired farm workers have the poorest education and the lowest income. With minor exceptions they are unprotected by minimum wage legislation or unemployment compensation.

MIGRATION

Extent of Farm-Nonfarm Migration

A common adjustment of many farm people to the complex of factors affecting agriculture has been physical migration to nonfarm places. This has been going on for many years. The extent of the movement is not precisely measured, but it is estimated that on the basis of the old farm definition, about 12,118,000 persons left farms from April 1950 to April 1959 or lived on places which were declassified as farms in the period. The latter element is a relatively minor part of the total. Partly counterbalancing this outmovement was a movement to farms of 4,869,000 persons (including a small number of cases where places were reclassified as farm without in-migration of occupants). This resulted in a net outmigration for the nine-year period of 7,249,000 persons. During the same time, about 5,100,000 children were born into the farm population and 1,737,000 farm residents died. This 3,363,000 natural increase in the farm population (excess of births over deaths) partly offset the heavy loss through net outmigration, leaving a net decrease in the size of the total farm population of 3,886,000 from 1950 to 1959.

Inasmuch as the total nonfarm population of the nation increased by about 27,400,000 from 1950 to 1959, migrants from farms made up over a fourth of the nonfarm growth. If one looks at the age range in which migrants from farms are concentrated — fifteen to thirty-four years — the effects of the farm-to-nonfarm migration are even more striking. The number of nonfarm people in this age group rose by somewhat less than 1,600,000 from 1950 to 1959, but the number would have declined by nearly 2,500,000 had not over 4,000,000 young people left farms in the period.

Such a decline would have occurred because the non-farm youth entering this age range were born during the low birth rate period of the 1930's and were fewer in num-

bers than those leaving the group (becoming thirty-five years old). In a decade of generally full employment, the migratory movement of farm youth was a tremendous contribution to industries needing young adult workers.

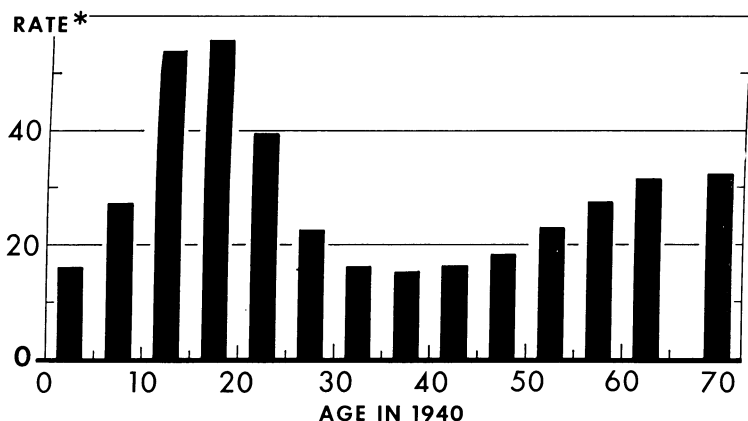
This contribution of the farm population to growth of the nonfarm young adult population will soon begin to recede in both numerical and relative importance. Farm births have been slowly declining, thus shrinking the sources of migrants. More important, the huge number of nonfarm children born during the war and postwar years are now beginning to reach adulthood and furnish nonfarm areas with their own growing sources of workers. One may infer that in coming years farm young people seeking nonfarm jobs will experience more severe competition from nonfarm youth than they have since World War II.

Age and Sex Patterns of Farm Migration

Although patterns of migration differ somewhat from region to region, net outmigration rates are generally far highest for persons in their late teens and early twenties. More than half of all teen-aged farm youth in 1940 had left their farm homes by 1950 (Figure 10.2). Such rates have persisted in the 1950's.

In some areas of severe agricultural adjustment, such as central Oklahoma and east Texas, these rates reach 75 percent within a decade's time. The outmigration of girls becomes heavy at an earlier age than that of boys and is more complete, leaving the farm population with its traditional excess of men over women.

Net outmigration rates decline greatly when farm people reach their thirties and forties, averaging less than 17 percent for a ten-year period. People of these ages are usually young enough to make a reasonable personal and economic adjustment in nonfarm life, but presumably the great majority are either satisfied with farming or at least have made their choice and tend to stick with it. Their capital investment in farming is often large. With further



*CHANGE DUE TO NET MIGRATION EXPRESSED AS A PERCENTAGE OF SURVIVORS TO 1950 OF PERSONS LIVING IN 1940

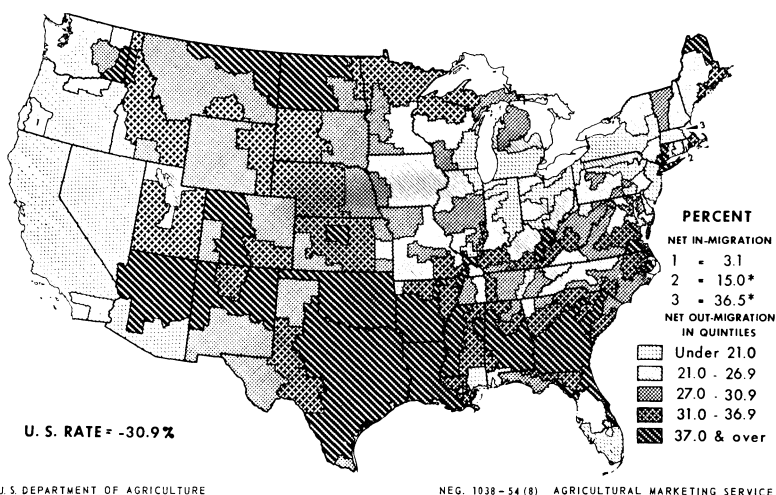
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Fig. 10.2 — Rate of outmigration from the U.S. farm population, 1940-50.

increasing age, and the onset of physical infirmities, widowhood, or planned retirement, the outmigration rate rises again, to a figure about double that in middle age.

A majority of migrants from farms come from the South, including a majority of all white migrants. Since 1940 the heaviest rates of outmovement came from a broad crescent extending westward from the old Cotton Belt of the Southeast through most of Texas and northward through the Great Plains to the Canadian border. The areas within this crescent have usually been characterized by high birth rate and by cash-crop farming systems that have undergone extensive changes in technology, tenure, and size of farm. Access to nonfarm employment opportunities is lacking over large sections of these areas. Where such opportunities are present the farmland is often so poor that farming is abandoned when off-farm work is taken. High outmigration from farms is also evident from certain smaller districts which include such high birth rate areas as Indian, Spanish-American, and Mormon parts of the Moun-



* THESE APPARENT RATES OF NET IN-MIGRATION ARE A RESULT OF PROBLEMS ARISING FROM URBAN-RURAL DEFINITION CHANGES BETWEEN 1940 AND 1950 AND PROBABLY SHOULD NOT BE CONSIDERED RELIABLE.

Fig. 10.3 — Net migration from the U.S. rural-farm population for state economic areas, 1940-50.

tain states; the Palouse country; the northern Great Lakes cut-over country; the Aroostook potato district of northern Maine; and the mining and subsistence farming sections of eastern Kentucky (Figure 10.3).

Outmigration has been lower than average from most of the Corn Belt and Dairy Belt lands of the Midwest and Northeast. This seems attributable at least in part to smaller size of farm families resulting in less "surplus" labor force, to higher levels of farm living, and to less abandonment of farming because of more nonfarm employment opportunities and better farmland. Outmigration has also been very low from the Pacific states, where certain types of farming are still expanding and new irrigation projects still opening. Within the South, farm outmigration has not been high from most of the Florida Peninsula, much of the interior plateaus and mountains where cotton is absent, or from some of the flue-cured tobacco districts of the Piedmont and Coastal Plain.

Data are not available to measure the destinations of migrants on a national basis. It is evident from data on growth of the population by residence distribution, however, that most have gone to urban places. Some migrants do not stray far from home. On the other hand, from the Midwest many thousands have gone to the Pacific states and the Southwest, at the same time that thousands of former southern farm people have poured into the most industrialized parts of the Midwest.

What motivates people to leave the farm? Obviously the reasons differ from person to person. The following list is based upon reasons most often cited by farm people in recent years. (The list is not intended to reflect order of importance.)

1. The anticipation of higher earnings from nonfarm work, especially in the light of the high cash requirements for modern living.
2. The ready availability of nonfarm jobs in many parts of the country.
3. Difficulties of getting started in farming today, particularly the high capital investment required and the intense competition for available land.
4. The attraction of city life and nonfarm occupations to young people, associated with higher educational attainment of farm youth and increased exposure to nonfarm life.
5. Effects of compulsory military service on former farm youth, such as acquisition of nonfarm skills and "worldly" attitudes and aspirations.
6. Emergence of certain ethnic groups, such as Negroes, Indians, and Spanish-Americans, into the main-streams of life in the United States and associated dissatisfaction on their part with the ethnic-oriented restraints of their rural homelands.
7. Decline in the number of farms available for operation because of the consolidation of existing farms into larger units.

8. Decline in the need for tenant farmers and full-time farm-resident hired workers because of changing technology and other factors.
9. Decline in the manpower needed in farming due to acreage allotment rents and the placement of millions of acres in the conservation reserve.
10. Subdivision of farms near cities for housing developments.
11. Stepped-up takeover of farms for highways, military use, industrial facilities, recreational purposes, and timber production.
12. Increased real estate taxes.
13. Persistence in some areas of such older rural disadvantages as poor roads and schools.

The volume of farm migration in any year may be influenced to some extent by the course of national events. A new acreage allotment cut or soil bank plan will result in an increase in outmigration from farms in the year in which it is put into effect. The inauguration of a social security program may retard outmovement temporarily as farmers seek to qualify for benefits by staying on the farm longer than they otherwise might have.

An economic recession invariably sends a few ex-farm youth back to the parental fold. The effects of such events have rarely lasted for more than one year. Since the end of World War I, only the prolonged depression of the 1930's and the war conditions of the 1940's seem to have had large-scale longer term consequences on the size of the farm population. During the 1930's, migration from farms was definitely slowed because of the lack of nonfarm jobs. However, a true back-to-the-farm movement was evident only for about a year and a half at the depth of the depression.

The advent of the war created a tremendous outpouring from the farms for both military and industrial purposes that resulted in a rapid and lasting reduction in the farm population.

The decline in the farm population obviously has not reached its end. No abatement of the desire to consolidate farms into larger units is in sight. Also, there are still many small-to-medium scale farmers of middle age or older, with up to 20 years of activity remaining. Their farms will not become available for consolidation until after the death of the owner. In light of the fact that the farm population is only half as large under the new definition as it was in 1940, it is obvious that the bulk of decline and outmigration has already taken place. Both the number and rate of migrants are likely to drop in the future.

It should be noted, however, that even if the number of farms reaches a point of stability, a rather high rate of outmigration will persist among young farm people. This is true because of the continued high birth rate of farm families. The number of children born to farm couples is two-thirds greater than is required for the replacement of the population.⁶ Thus, even should it become economically feasible for the farm population to maintain a stable level, about 40 percent of the farm children would still have to seek their fortunes in nonfarm ways.

OPPORTUNITIES FOR FARM PEOPLE

It is generally agreed that there is an excess of people in farming. The 1960 census will reveal the changes that have taken place since the 1950 and 1955 censuses.

In 1955, 69.6 percent of total farms (census definition) were commercial farms and produced 98 percent of market sales. At that time 27 percent of the total farms had gross sales of \$5,000 or more annually. They produced 78 percent of all market sales of farm products.

A look at the human resources in terms of present situation and magnitude of adjustments faced will help bring into focus the specific phases of the problem.

⁶ Despite the well-known urban "baby boom," farm women are still bearing more than one and a half times as many children per woman as are urban women. Rural nonfarm women are intermediate between the two other groups. See *Current Population Reports*, U.S. Bureau of the Census, Series P-20, No. 84.

TABLE 10.2
OPERATORS OF COMMERCIAL FARMS BY AGE GROUPS AND ECONOMIC CLASS,
1949 CENSUS DATA *

Age in years	Classes I and II	Class III	Class IV	Class V	Class VI	Total, all classes
<i>Percent of commercial farm operators</i>						
0-25	2.5	2.2	2.9	5.2	4.7	3.6
25-34	21.1	19.5	17.6	15.9	12.3	17.0
35-44	30.3	28.8	26.0	23.5	17.4	24.8
45-54	24.9	25.3	22.0	21.9	18.4	22.3
55-64	14.8	16.8	18.9	19.1	22.6	18.7
65+	6.4	7.4	12.6	14.4	24.6	13.5
<i>Total number of operators, all ages</i>						
481,386	748,932	903,411	912,664	722,666	3,769,059	
<i>Median age of commercial farm operators, years</i>						
43.7	44.8	46.6	47.6	53.6	47.1	

* Class limits fixed by value of sales: Class I, \$25,000+; Class II, \$10,000-\$24,099; Class III, \$5,000-\$9,999; Class IV, \$2,500-\$4,999; Class V, \$1,200-\$2,499; Class VI, \$250-\$1,199.

Source: *Farms and Farm People*, USDA and Bureau of the Census cooperating, June 1953.

Older farm operators are more numerous on less productive farms (Table 10.2).⁷ More than 45 percent of the Class VI operators (\$250-\$1099 farm income) were over fifty-five years of age and approximately a third of the Classes IV and V operators (\$1200-\$4999 farm income) were over fifty-five. There were relatively few operators under twenty-five years of age in any category, but the percentage increased sharply on the better units in the twenty-five to forty-four year age group.

The outmigration figures given earlier in the chapter indicate that substantial changes have occurred within the farming sector since 1950. However, we do not know how much the farm income pattern by age groups may have changed.

⁷ Karl Shoemaker, *Opportunities and Limitations in Employment of Farm People Within and Outside of Farming*, USDA, AEP-89, 1958.

In terms of opportunities in farming, particularly for young farm people, we know that the size of the farm has continued to increase and there is every reason to anticipate that this trend will continue through the 1960's.

Mechanization in the Corn Belt, in the plains, and more recently in the Cotton Belt, has been a big factor in increasing the size of farm. Yet one wonders how much mechanization is still to come and what impact this will have on size of farm.

Farm size can be measured both in terms of acres and volume of business. Some of our larger farms are heavily mechanized livestock feed lot, broiler, laying flock, or turkey operations on a relatively small number of acres. Still others are very extensive livestock ranching operations or cash crop farms including large acreages.

On most farms a high degree of coordination of mechanized equipment is still to be achieved. This is particularly true of the general livestock and dairy farms. As this is achieved family farms will be still larger and the need for labor or human resources in farming will be further reduced.

Existing Operators

Based on an opportunity study, Nesius points out that there are 776,000 commercial farm operators under thirty-five years of age, 276,000 of whom have farm sales of \$5,000 or more.⁸ He states, "While it is not known how many young farm operators leave the farm annually after they are established, it is safe to assume that at least 500,000 in the United States, in the commercial farm operator group, need seriously to consider their low income status and determine whether it can be improved by a change to another occupation or a recombination of resources for a higher income producing unit."

⁸ Ernest Nesius, "Opportunities and Limitations in Programs for Younger and More Flexible Persons Now in Agriculture," in *Problems and Policies of American Agriculture*, Iowa State Univ. Press, Ames, 1959.

Youth

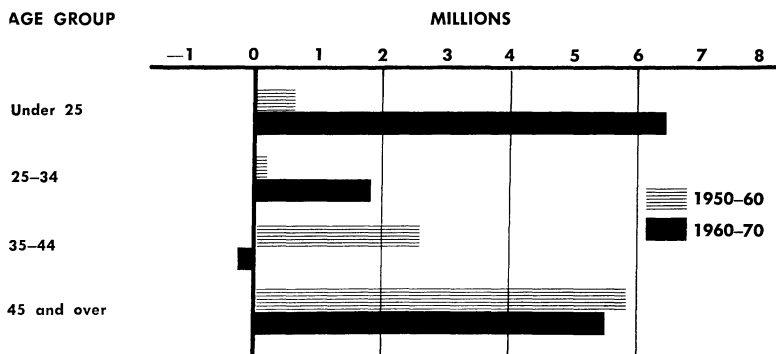
The Shoemaker study concluded that of the 2,200,000 males ten to nineteen years of age in rural farm operator families during the 1955-64 period, only 10 to 15 percent would have an opportunity to become successful farm operators with a relatively satisfactory income, based on the assumptions made in the study. With the outmigration that has occurred from farming since the 1955 census, and the increased competition from urban youth, it is probable that during the sixties a slightly higher percentage than the 10 to 15 percent may have an opportunity in farming.

Perhaps the major hurdle in becoming a farm operator is the capital investment required to purchase and operate a larger farm. Availability of a large enough farm unit is another limiting factor. A third limitation (though not as universally recognized as is justified) is the training in production technology, marketing, and business management required to operate an adequate farm efficiently.

Description of Overall Manpower Situation

To bring the problem of nonfarm alternatives into perspective, let us look at the manpower situation projected to 1970. It is estimated that to provide needed goods and services for a population of 208 million people, anticipated in 1970, the national income will have increased from \$500 billion in 1960 to about \$750 billion in 1970, at 1958 prices. An expansion of these dimensions would require an estimated increase of about 13.5 million workers to a total labor force of 87 million by 1970. This assumes a continued increase in production per man-hour and a somewhat shorter work year than in 1960.

The population here today — and available to be counted — indicates that an increase of 13.5 million in the labor force is possible. However, the question is: Who are these additional people, and will the individuals make the necessary adjustments from one industry to another, including people now underemployed in farming.



Source: Manpower Challenge of the 1960s, U. S. Department of Labor

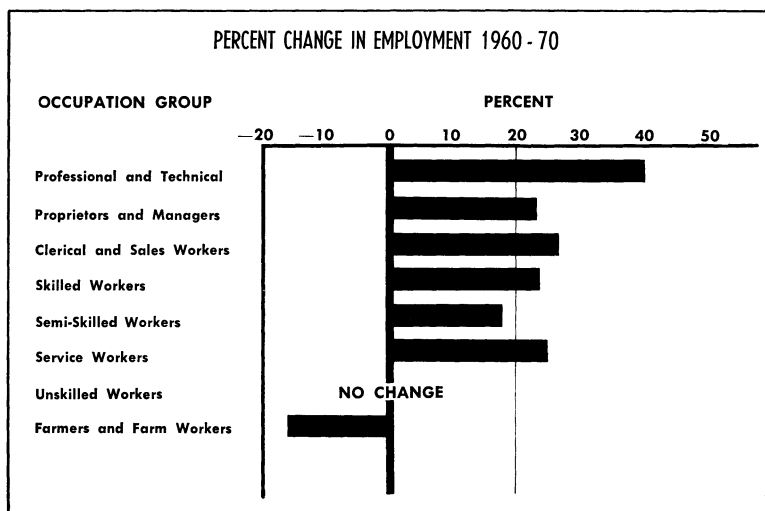
Fig. 10.4—Changes in the number of workers in each age group 1950 to 1960 and 1960 to 1970.

Because of the low birth rate of the 1930's, there will continue to be a shortage of men and women in the labor force who were born in those years. By 1970 they will be in the thirty to forty year age group. Figure 10.4 shows that of the 13.5 million increase in the labor force only 1.6 million or 12 percent will come from the prime age group of twenty-five to forty-four years.

Women are an increasingly important factor in our labor force. By 1970 there will be 30 million women workers, six million or 25 percent more than in 1960. This compares with a 15 percent increase for men.

Occupational Opportunities

Young Americans now in training need to be informed about occupational opportunities. Assuming a continuation of the basic trends and occupations in the United States during the first half of the twentieth century, our growing economy will require about 40 percent more professional and technical people by 1970 than were employed in 1960 (Figure 10.5). This group will command the highest income and have the greatest increase in job opportunities.



Source: Manpower Challenge of the 1960s, U. S. Department of Labor

Fig. 10.5 — Percent change in U.S. employment, 1960–70.

There will be substantial increases in requirements for proprietors and managers, clerical and sales people, skilled craftsmen and service workers, with smaller increases among semiskilled workers. The need for unskilled labor is not expected to increase.

The 17 percent decline projected for farmers and farm workers in Figure 10.5 reflects a continuation of the current rate of decline. This does not attempt to indicate need or situation as a result of the change in census definition mentioned earlier.

Bonnen points out in Chapter 5 that total farm production per man-hour of labor has risen 185 percent since 1940. This fact combined with the low productivity of at least 50 percent of farm operators as reflected in the income figures of the last census, suggests that the need for farmers and farm workers in 1970 would be substantially less.

Young people raised on farms should be informed of the growing trend in demand for their services in areas

TABLE 10.3

NUMBER OF EMPLOYEES IN PRODUCTION AND SERVICE INDUSTRIES IN 1960*

Production industries	Million workers	Service industries	Million workers
Manufacturing	16	Trade	11.5
Farming	6	Government services	8.0
Construction	3	Transportation and Public Utilities	4.0
Mining	1	Finance, Insurance, Real Estate	2.5
		All other services	6.5
Total	26	Total	32.5

* Excludes domestic service and the self-employed outside of agriculture.
Source: *Manpower Challenge of the 1960's*, U.S. Dept. of Labor.

other than farming before they decide what vocation to prepare for and what schooling and training they will need to qualify for good jobs off the farm. The manpower problem in farming of the future will be one of quality rather than quantity.

Nonfarm Opportunities for Farm People

More people are employed in the service industries than in the production industries (Table 10.3). Employment will continue to grow faster in the service industries.

We are told that most new workers replace someone. Hence, it is significant that in a recent year, more than eight million different workers changed jobs. These eight million workers made 11.5 million job changes. About two-thirds of these job changes were to a completely different industry, and about one-half of them were to a completely different occupation group, according to the U.S. Department of Labor.

Today's labor force is also quite mobile — about 7 percent of all male workers are now living in a county different from the one they were in the year before. More than half of this 7 percent moved to a different state.

What does this mean to farm people interested in non-farm jobs? First, farmers in the twenty-five to forty-four year age group with special skills have an advantage. They are in the age group that generally spells stability to the industrialist. The increase in this age group is quite small — 12 percent of total labor force increase from 1960 to 1970 — and people with skills are in demand. Their big decision will be to make the change, to move the children, and which job to take.

This does not necessarily mean that everyone changing from a farm to a nonfarm occupation will have to leave the community in which they now live. The nature of the community, the present industrial development, current job alternatives, and the skill capabilities of the individual will be the determining factors.

Agribusiness Opportunities

The expanding functions performed by off-farm industries as farmers buy more of their production supplies and consumers demand more processing and services, cause many people to be enthusiastic about nonfarm jobs for farm people in farm related industries.

In 1954, 40 percent of total consumer expenditures were for food, fiber, and tobacco products. To produce this \$93-95 billion worth (end products at the consumer level), farmers bought \$16.4 billion of farming supplies or 7 percent of total consumer purchases.

There are many jobs in both the farm supply and food assembling, processing, and distribution fields. A wide range of skills are required. Particularly in the farm supply sales and service end, people with farm background and equal levels of training with their nonfarm competitors may have an advantage in obtaining jobs.

The degree to which farm related businesses can or will absorb people from farming will depend largely on the training and ability of farm people to meet the job requirements. Employers, particularly in the farm supply busi-

ness, frequently say they prefer to hire people with farm background. They nearly always qualify this by adding — “but we can’t find enough of them who have the necessary training.

Young people planning to take nonfarm jobs should realize:

1. They are one of 26 million who will enter the labor force for the first time during the sixties.
2. Education will be more important than ever — high school enrollments will increase nearly 50 percent during the 1960’s and college enrollments will increase by 70 percent.
3. Seventy percent of the new young entrants to the labor force in the 1960’s will be high school graduates or have some college training.
4. While the number of semiskilled workers are not increasing as rapidly as some other groups (Figure 10.5), some of these may move up, making room for more from farms.
5. The varied farm experience background may be an asset in many jobs such as construction, road building, operating machinery, and in farm related businesses, and may speed one’s progress.
6. If they are among the 7.5 million entering the labor force in the 1960’s who have not completed high school — or the 2.5 million who did not even complete grade school — the competition will be heavy, the pay will probably be less, and they will face more frequent periods of unemployment.⁹

Farm youth still in school should acquaint themselves with career opportunities and equip themselves to do the job to which they are best suited. If they are out of school and do not have the training for skilled jobs they may want to explore the opportunities to obtain needed training.

⁹ U.S. Dept. of Labor, *Manpower Challenge of the 1960’s*, pp. 16, 17.

There are jobs requiring technical training unfilled — yet as we entered the 1960's about 5 percent of the labor force was unemployed. This general situation probably will continue.

The big challenge for farm people desiring to change occupations will be to meet the technical and professional requirements of alternative opportunities.

REFERENCES

- Bowles, Gladys K. *Farm Population: Net Migration from the Rural-Farm Population, 1940-50*. USDA, Stat. Bul. 176, 1956.
- Bureau of the Census. *Civilian Population of the U.S., by Type of Residence, April 1959, 1950*. Series P-20, No. 98 (Revised), 1960.
- . *Fertility of the Population: March 1957*. Series P-20, No. 84, 1958.
- . *1954 Census of Agriculture*. Vol. II, Chap. II, 1956.
- Cowhig, James D., and Maitland, Sheridan T. *An Analysis of the Experienced Hired Farm Working Force, 1948-57*. USDA, Agr. Info. Bul. 225, 1960.
- . *The Hired Farm Working Force of 1958*. USDA, Agr. Info. Bul. 219, 1959.
- Ford, Richard G. *Agriculture and Its Relationship to Other Segments of the Economy*. USDA, AEP-80, 1958.
- Nesius, Ernest. "Opportunities and Limitations in Programs for Younger and More Flexible Persons Now in Agriculture," in *Problems and Policies of American Agriculture* (Center for Ag. and Econ. Adjustment). Iowa State Univ. Press, Ames, 1959.
- Shoemaker, Karl G. *Opportunities and Limitations for Employment of Farm People Within and Outside of Farming*. USDA, AEP-89, 1958.
- USDA. *Farm Population: Estimates for 1950-59*. AMS-80, 1959.
- USDA and Bureau of the Census. *Farms and Farm People*. 1953.
- U.S. Dept. of Labor. *Manpower Challenge of the 1960's*.